

### **Amendments to the Claims:**

1. (Currently Amended) A computer-implemented method for troubleshooting a problem associated with a cellular network site, comprising:

receiving a symptom input describing the symptoms of the problem associated with the cellular network site;

determining whether at least one of a plurality of rules is invoked by the symptom input, wherein the plurality of rules comprise a plurality of if-then statements, wherein the plurality of if-then statements comprise a plurality of if portions and a plurality of then portions, the then portions corresponding to potential solutions to the problem, and wherein at least a portion of the plurality of rules is generated by a software application for interviewing cellular network site engineers; and

if so, then outputting a potential solution to the problem wherein the potential solution is determined by the invoked rule; and

storing the symptoms in a provisional rules list when none of the plurality of rules are invoked.

2. (Original) The method of claim 1 wherein determining whether at least one of a plurality of rules is invoked by the symptom input comprises determining whether the symptom input matches one of the plurality of if portions; and if so, then determining that the rule associated with the matched if portion is invoked.

3. (Previously Presented) The method of claim 1 wherein outputting a potential solution to the problem comprises outputting the then portion of the invoked rule.

4. (Original) The method of claim 3 wherein outputting a potential solution to the problem comprises displaying the potential solution in a user interface of a computing device.

5. (Original) The method of claim 1 further comprising receiving a facts input describing relevant facts regarding the cellular network and wherein determining whether at least

one of a plurality of rules is invoked by the symptom input further comprises determining whether at least one of a plurality of rules is invoked by the symptom input and the facts input.

6. (Canceled)

7. (Original) The method of claim 6 further comprising:  
receiving a potential solution input; and  
adding the symptom input and potential solution input as one of the plurality of rules stored in a knowledge database.

8. (Cancelled)

9. (Currently Amended) The method of claim 5 further comprising:  
receiving an indication input indicating whether the potential solution was successful;  
and  
~~if the indication input indicates that the potential solution was not successful, then adding the symptom input and facts input to a provisional rules list.~~

10. (Original) The method of claim 9 further comprising:  
receiving a potential solution input; and  
adding the symptom input and potential solution input as one of the plurality of rules stored in a knowledge database.

11. (Currently Amended) An expert system for troubleshooting a problem in a cellular network site, the expert system comprising:  
a user interface for transmitting and receiving data to and from the expert system;  
an inference engine connected to the user interface, wherein the inference engine receives data from the user interface and transmits data to the user interface;  
a knowledge database connected to the inference engine, wherein the knowledge database comprises a plurality of rules used to provide potential solutions to the problem, wherein the plurality of rules comprise a plurality of if-then statements wherein the if portion corresponds to the problem and the then portion corresponds to a potential solution, and wherein at least a

portion of the knowledge database is populated with the plurality of rules using a knowledge acquisition facility (KAF) comprising a software application for interviewing cellular network site engineers, wherein the knowledge database stores symptoms of a problem in a provisional rules list when none of the plurality of rules are invoked; and

a domain database, wherein the domain database comprises a plurality of facts regarding the cellular network site.

12. (Canceled)

13. (Cancelled)

14. (Cancelled)

15. (Previously Presented) The expert system of claim 11 wherein the KAF formulates a plurality of if-then statements from the interviews with the cellular network site engineers wherein the plurality of if-then statements are stored as the plurality of rules in the knowledge database.

16. (Currently Amended) A computer-readable medium having computer-executable instructions which, when executed on a computer, cause the computer to perform a method for troubleshooting a problem associated with a cellular network site, the method comprising:

receiving a symptom input describing the symptoms of the problem associated with the cellular network site;

determining whether at least one of a plurality of rules is invoked by the symptom input, wherein the plurality of rules comprise a plurality of if-then statements, wherein the plurality of if-then statements comprise a plurality of if portions and a plurality of then portions, the then portions corresponding to potential solutions to the problem, and wherein at least a portion of the plurality of rules is generated by a software application for interviewing cellular network site engineers; ~~and~~

if so, then outputting a potential solution to the problem wherein the potential solution is determined by the invoked rule; and

storing the symptoms in a provisional rules list when none of the plurality of rules are invoked.